

Percent Identity

Divergence

	1	2	
1		66.1	1
2	45.3		2
	1	2	

SEQ 43 and Figure 25 Briles
SEQ 24 SP100D1

10

20

CC AAGCTA TTAGGTGACACT
 CCAAGCA GCCACTTCTTCTA

SEQ 43 and Figure 25 Briles

SEQ 24 SP100D1

30

40

1 A TAGAATAGCTAAGCTATCC
 1 ATATGGCA A - - AGACAAGAAAC

SEQ 43 and Figure 25 Briles

SEQ 24 SP100D1

50

60

1 ATCAAGCTTAATGCTTGTCAA
 9 ATAGGAAGAGCTGCTAAACA

SEQ 43 and Figure 25 Briles

SEQ 24 SP100D1

70

80

1 TAAATC-ACAATAATGCTAGAT
 9 GCGTCCGATGATATATATAGAA

SEQ 43 and Figure 25 Briles

SEQ 24 SP100D1

90

100

10 CAATCTCTGTTTATGCAAGT
 9 AAAAGGAGAGGAGATTC

SEQ 43 and Figure 25 Briles

SEQ 24 SP100D1

110

120

100 AAAACATCTCTA-ATCTCT
 9 ACTAGATACAGAGAAACATA

SEQ 43 and Figure 25 Briles

SEQ 24 SP100D1

130

140

119 TAAATCTCTCTGACTT
 119 CCCAAAATGTCTGCTTAAAC

SEQ 43 and Figure 25 Briles

SEQ 24 SP100D1

150

160

139 GATCTCTGACCTCTCTCA
 139 ATAAAGGAGCCGCAATTAA

SEQ 43 and Figure 25 Briles

SEQ 24 SP100D1

170

180

159 GTCA - - - TGCCTTAATCTCT
 159 AACGAAGTATTTGCGTGAAAT

SEQ 43 and Figure 25 Briles

SEQ 24 SP100D1

190

200

76 T T C G T T T T A G T T T T T C C A G T SEQ 43 and Figure 25 Briles
 79 T A A A G G T T T T A G A A G A G A A G SEQ 24 SP100D1

210

220

96 T T A T G C A G T T A T T T T C T A T C SEQ 43 and Figure 25 Briles
 99 T C G A A A G A T G A G T T G C C G T C SEQ 24 SP100D1

230

240

16 G A C G A A T A G C T G A A G A G G A A SEQ 43 and Figure 25 Briles
 19 A G - A A A T A A A A C C A A A C T T A SEQ 24 SP100D1

250

260

36 A A G C T A T T A C A T C A A G T T A T SEQ 43 and Figure 25 Briles
 38 G A C G C A G C T T T T G A G A - - - - SEQ 24 SP100D1

270

280

56 A A T C C C A A A A G G A A G C T T A A SEQ 43 and Figure 25 Briles
 54 A G T T T A A A A A A G A T A C A T T G SEQ 24 SP100D1

290

300

76 A G A G A T A A A T C A A A A A T T A SEQ 43 and Figure 25 Briles
 74 A A A C C A G G A G A - A A A G G T A G SEQ 24 SP100D1

310

320

96 A T T A A A A T A C A A T T C A T A T T SEQ 43 and Figure 25 Briles
 93 C A G A A G C C A A A G A A G A A G G T T SEQ 24 SP100D1

330

340

116 G A A G A A A T A T A T A A G G C T T A SEQ 43 and Figure 25 Briles
 113 G A A G A A G C T A A G A A A A A A G C SEQ 24 SP100D1

350

360

136 A A G A A A A A A T A A A A A A A A SEQ 43 and Figure 25 Briles
 133 C G A G G A T C A A A A A A A A A A A G SEQ 24 SP100D1

370

380

56 A T A A A C A T G T T T G C - - A T C A SEQ 43 and Figure 25 Briles
53 A T C G T C G T A A C T A C C C A A C C SEQ 24 SP100D1

390

400

74 A A A A G C G A A A G A A A A G T A C A SEQ 43 and Figure 25 Briles
73 A A T A C T T A C A A A A C G C T T G A SEQ 24 SP100D1

410

420

94 T T A T T C A A T T C G T A A A T T T A SEQ 43 and Figure 25 Briles
93 A C T T G A A A T T G C T G A G T T C G SEQ 24 SP100D1

430

440

114 G A T T G A A T A C T A G T G T A G SEQ 43 and Figure 25 Briles
113 A T G T G A A A C T - - T A A A G A A G SEQ 24 SP100D1

450

460

134 C G T T T C C A G T T T C T A A G SEQ 43 and Figure 25 Briles
131 C G G A G C T T C A A C T A G T A A A A SEQ 24 SP100D1

470

480

154 G A A A G T C C T T T T G G A C C SEQ 43 and Figure 25 Briles
151 G A G G A - - - A G C T A A A G A A T C SEQ 24 SP100D1

490

500

174 A G A A A C T T T A A A A A C C C A SEQ 43 and Figure 25 Briles
168 T C G A A A C G A G C C C A C A A T T A SEQ 24 SP100D1

510

520

194 A C T T G C C C T T C T T A A T A SEQ 43 and Figure 25 Briles
188 A G C A A G C A A A A G A G A A A G T T SEQ 24 SP100D1

530

540

214 C C C A A A C A C A A A A A T A A A A SEQ 43 and Figure 25 Briles
208 G A G A G T A A A A A A G C T G A G G C SEQ 24 SP100D1

550

560

34 A A - G C G C T A A A C A G T C G T C G SEQ 43 and Figure 25 Briles
28 T A C A A C C C T T A G A A A A C A T C A SEQ 24 SP100D1

570

580

53 A T G A A T A T A T A G A A A A A A T G SEQ 43 and Figure 25 Briles
48 A - - G A C A G A T C G T A A A A A A G SEQ 24 SP100D1

590

600

73 T T G A C C C A G A T T C A A C T A G A SEQ 43 and Figure 25 Briles
66 C A G A A C A A A G A A G C T A A A C C A SEQ 24 SP100D1

610

620

93 T A G A A G A A A A C A T A C C C A A A SEQ 43 and Figure 25 Briles
86 A A A G C A G A T G C T A A G T T G A A SEQ 24 SP100D1

630

640

113 A T G T C C C C T T A A A C A T A A A G SEQ 43 and Figure 25 Briles
106 G G A A C C T A A T G T A G C G A C T T SEQ 24 SP100D1

650

660

133 T T G A G C C C A A T T A A C A A A SEQ 43 and Figure 25 Briles
126 C A C A T C A A A G G T A A A C C A A A G SEQ 24 SP100D1

670

680

153 T A T C T C C C A A T T A A T C T T SEQ 43 and Figure 25 Briles
146 G G G C G G G C A A A A C G A G G A G T SEQ 24 SP100D1

690

700

173 T A G A A G A A A A T C C A A A T T A SEQ 43 and Figure 25 Briles
166 T C C T G G A G A G C T A G C A A C A C SEQ 24 SP100D1

710

720

193 G C C C C C C G A A A T A A A A - SEQ 43 and Figure 25 Briles
186 C T G A T A A A A A A G A A A A T C A T SEQ 24 SP100D1

730

740

'12 CCGAAGTTAGACGCCGCTTT SEQ 43 and Figure 25 Briles
'06 GCGAAGCTCTTCAAGATTCTAG SEQ 24 SP100D1

750

760

'32 TGAATACTTAATAA----- SEQ 43 and Figure 25 Briles
'26 CGTAGGTGAGAGAAACTCTTC SEQ 24 SP100D1

770

780

'46 -AGATAAT---TGAAAACA SEQ 43 and Figure 25 Briles
'46 CAGGCTCAACCCCGAATCA SEQ 24 SP100D1

790

800

'62 GAGAAAAAGGTAGC-GAAGC SEQ 43 and Figure 25 Briles
'66 GGAATAAAAGGTAGCAGAAC SEQ 24 SP100D1

810

820

'81 TAAATAAGT-TGAAAGAG SEQ 43 and Figure 25 Briles
'86 TCAGAAAGAGCTTCAGAGAG SEQ 24 SP100D1

830

840

'00 CTATTAATAGC--AGGCT SEQ 43 and Figure 25 Briles
'06 CCGAAGAAATAAGCCCAAGGAT SEQ 24 SP100D1

850

860

'18 CAATATTAAGTATCTC-- SEQ 43 and Figure 25 Briles
'26 CAAATATTAAGTATCTC-- SEQ 24 SP100D1

870

880

'37 TAAATTAAGTATCTC-- SEQ 43 and Figure 25 Briles
'46 TAACTACCCAGCAATACCT SEQ 24 SP100D1

890

900

'57 -CAATTAAGTATCTC-- SEQ 43 and Figure 25 Briles
'66 ACAAATTAAGTATCTC-- SEQ 24 SP100D1

910

920

76 ATTCCTGAGTC - GATGTC AA SEQ 43 and Figure 25 Briles
86 ATTCCTGAGTC GATGTC AA SEQ 24 SP100D1

930

940

95 ACTTAAAGAGCGGAGCTTG SEQ 43 and Figure 25 Briles
06 ACTTAAAGAGCGGAGCTTG SEQ 24 SP100D1

950

960

15 AACTAGTAAA - GAGGAGAGCT SEQ 43 and Figure 25 Briles
26 AACTAGTAAAAGAGGAGAGCT SEQ 24 SP100D1

970

980

34 GAA - - - - CTGAGAGACGAGGA SEQ 43 and Figure 25 Briles
46 AAGGAGAGCTGAGAGACGAGGA SEQ 24 SP100D1

990

1000

50 AAAAAAAAAAAAAAAAAA SEQ 43 and Figure 25 Briles
66 AAAAAAAAAAAAAAAAAA SEQ 24 SP100D1

1010

1020

70 CCAAGAGAGAGAGAGAGAGAG SEQ 43 and Figure 25 Briles
86 CCAAGAGAGAGAGAGAGAGAG SEQ 24 SP100D1

1030

1040

90 GCTGAGAGAGAGAGAGAGAG SEQ 43 and Figure 25 Briles
006 CCTGAGAGAGAGAGAGAGAG SEQ 24 SP100D1

1050

1060

1010 AAGAGAGAGAGAGAGAGAG - SEQ 43 and Figure 25 Briles
026 AAGAGAGAGAGAGAGAGAG SEQ 24 SP100D1

1070

1080

029 AAGAGAGAGAGAGAGAGAG - T SEQ 43 and Figure 25 Briles
046 AAGAGAGAGAGAGAGAGAG SEQ 24 SP100D1

1100

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.048 A A A C G G A A A G C A G C A G A A G A SEQ 43 and Figure 25 Briles
.066 A A A C G G A A A A G C A G C A G A A G A SEQ 24 SP100D1

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1120

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.068 A G A T A A A G T T A A A G A A A A A C SEQ 43 and Figure 25 Briles
.086 A G A T A A A G T T A A A G A A A A A C SEQ 24 SP100D1
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1140

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.088 C A G C T G A A C A A C C A C A A C C A SEQ 43 and Figure 25 Briles
.106 C A G C T G A A C A A C C A C A A C C A SEQ 24 SP100D1
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1160

108 GCGGCGGGTACGCAAGCGCA SEQ 43 and Figure 25 Briles
126 GCGGCGGGTATTCGCAAGCGCA SEQ 24 SP100D1

1180

.127 A A A C T G A A A A A A A A A A A A A A A A SEQ 43 and Figure 25 Briles
.146 A A A A C T A A T T C A A A A A A C C A G SEQ 24 SP100D1

1200

.147 A G A A C C C A G C T G A A C A A C C A SEQ 43 and Figure 25 Briles
.166 A G A A C C C A G C T G A A C A A C C A SEQ 24 SP100D1

1220

.167 A A A C T A C C A A A A A C A G A T C A SEQ 43 and Figure 25 Briles
.186 A A A C T A C C A A A A A C A G A T C A SEQ 24 SP100D1

1240

.187 [REDACTED] SEQ 43 and Figure 25 Briles
.206 [REDACTED] SEQ 24 SP100D1

1260

.207 [REDACTED] SEQ 43 and Figure 25 Briles
.226 [REDACTED] SEQ 24 SP100D1

1270

1280

.227 G A A T A T A A A G G C T T G A - T C A SEQ 43 and Figure 25 Briles
.246 G A A T A T A A A T C G C T T G A C T C A SEQ 24 SP100D1

1290

1300

.246 A C A G G A A C C G C C A A A A A C T G SEQ 43 and Figure 25 Briles
.266 A C A G G A A C C G C C A A A A A C T G SEQ 24 SP100D1

1310

1320

.266 A A A A A C C A A C A C A A C C A T - T SEQ 43 and Figure 25 Briles
.286 A A A A A C C A A C A C A A C C A T C T SEQ 24 SP100D1

1330

1340

.285 A C T C C A A A A A C A SEQ 43 and Figure 25 Briles
.306 A C T C C A A A A A A A G G C T G G A A SEQ 24 SP100D1

1350

1360

.296 SEQ 43 and Figure 25 Briles
.326 A C A A G A A A A C G G T A T G T G G T SEQ 24 SP100D1

1370

1380

.296 SEQ 43 and Figure 25 Briles
.346 A C T T C T A C A A T A C T G A T G G T SEQ 24 SP100D1

1390

1400

.296 SEQ 43 and Figure 25 Briles
.366 T C A A T G G C A A C A G G A T G G C T SEQ 24 SP100D1

1410

1420

.296 SEQ 43 and Figure 25 Briles
.386 C C A A A A C A A C G G T T C A T G G T SEQ 24 SP100D1

1430

1440

.296 SEQ 43 and Figure 25 Briles
.406 A C T A T C T A A A C G C T A A T G G T SEQ 24 SP100D1

1450

1460

.296 SEQ 43 and Figure 25 Briles
.426 G C T A T G G C G A C A G G A T G G C T SEQ 24 SP100D1

1470

1480

.296 SEQ 43 and Figure 25 Briles
.446 C C A A A A C A A T G G T T C A T G G T SEQ 24 SP100D1

1490

1500

.296 SEQ 43 and Figure 25 Briles
.466 A C T A T C T A A A C G C T A A T G G T SEQ 24 SP100D1

1510

1520

.296 SEQ 43 and Figure 25 Briles
.486 T C A A T G G C A A C A G G A T G G C T SEQ 24 SP100D1

1530

1540

.296 SEQ 43 and Figure 25 Briles
.506 C C A A A A C A A T G G T T C A T G G T SEQ 24 SP100D1

1550

1560

.296 SEQ 43 and Figure 25 Briles
.526 A C T A C C T A A A C G C T A A T G G T SEQ 24 SP100D1

1570

1580

.296 SEQ 43 and Figure 25 Briles
.546 G C T A T G G C G A C A G G A T G G C T SEQ 24 SP100D1

1590

1600

.296 SEQ 43 and Figure 25 Briles
.566 C C A A T A C A A T G G T T C A T G G T SEQ 24 SP100D1

1610

1620

.296 SEQ 43 and Figure 25 Briles
.586 A C T A C C T A A A C A G C A A T G G C SEQ 24 SP100D1

1630

1640

296 SEQ 43 and Figure 25 Briles
606 G C T A T G G C G A C A G G A T G G C T SEQ 24 SP100D1

1650

1660

296 SEQ 43 and Figure 25 Briles
626 C C A A T A C A A T G G C T C A T G G T SEQ 24 SP100D1

1670

1680

296 SEQ 43 and Figure 25 Briles
646 A C T A C C T C A A C G C T A A T G G T SEQ 24 SP100D1

1690

1700

296 SEQ 43 and Figure 25 Briles
666 G A T A T G G C G A C A G G A T G G C T SEQ 24 SP100D1

1710

1720

296 SEQ 43 and Figure 25 Briles
686 C C A A A A C A A C G G T T C A T G G T SEQ 24 SP100D1

1730

1740

296 SEQ 43 and Figure 25 Briles
706 A C T A C C T C A A C G C T A A T G G T SEQ 24 SP100D1

1750

1760

296 SEQ 43 and Figure 25 Briles
726 G A T A T G G C G A C A G G A T G G C T SEQ 24 SP100D1

1770

1780

296 SEQ 43 and Figure 25 Briles
746 C C A A T A C A A C G G T T C A T G G T SEQ 24 SP100D1

1790

1800

296 SEQ 43 and Figure 25 Briles
766 A T T A C C T C A A C G C T A A T G G T SEQ 24 SP100D1

1810

1820

.296 SEQ 43 and Figure 25 Briles
.786 G A T A T G G C G A C A G G T T G G G T SEQ 24 SP100D1

1830

1840

.296 SEQ 43 and Figure 25 Briles
.806 G A A A G A T G G A G A T A C C T G G T SEQ 24 SP100D1

1850

1860

.296 SEQ 43 and Figure 25 Briles
.826 A C T A T C T T G A A G C A T C A G G T SEQ 24 SP100D1

1870

1880

.296 SEQ 43 and Figure 25 Briles
.846 G C T A T G A A A G C A A G C C A A T G SEQ 24 SP100D1

1890

1900

.296 SEQ 43 and Figure 25 Briles
.866 G T T C A A A G T A T C A G A T A A A T SEQ 24 SP100D1

1910

1920

.296 SEQ 43 and Figure 25 Briles
.886 G G T A C T A T G T C A A T G G C T C A SEQ 24 SP100D1

1930

1940

.296 SEQ 43 and Figure 25 Briles
.906 G G T G C C C T T G C A G T C A A C A C SEQ 24 SP100D1

1950

1960

.296 SEQ 43 and Figure 25 Briles
.926 A A C T G T A G A T G G C T A T G G A G SEQ 24 SP100D1

1970

1980

.296 SEQ 43 and Figure 25 Briles
.946 T C A A T G C C A A T G G T G A A T G G SEQ 24 SP100D1

1990

2000

.296 SEQ 43 and Figure 25 Briles
.966 G T A A A C T A A A C C T A A T A T A A SEQ 24 SP100D1

2010

2020

.296 SEQ 43 and Figure 25 Briles
.986 C T A G T T A A T A C T G A C T T C C T SEQ 24 SP100D1

2030

2040

.296 SEQ 43 and Figure 25 Briles
:006 G T A A G A A C T T T T T A A A G T A T SEQ 24 SP100D1

2050

2060

.296 SEQ 43 and Figure 25 Briles
:026 T C C C T A C A A A T A C C A T A T C C SEQ 24 SP100D1

2070

2080

.296 SEQ 43 and Figure 25 Briles
:046 T T T C A G T A G A T A A T A T A C C C SEQ 24 SP100D1

2090

2100

.296 SEQ 43 and Figure 25 Briles
:066 T T G T A G G A A G T T T A G A T T A A SEQ 24 SP100D1

2110

2120

.296 SEQ 43 and Figure 25 Briles
:086 A A A A T A A C T C T G T A A T C T C T SEQ 24 SP100D1

2130

2140

.296 SEQ 43 and Figure 25 Briles
:106 A G C C G G A T T T A T A G C G C T A G SEQ 24 SP100D1

2150

2160

.296 SEQ 43 and Figure 25 Briles
:126 A G A C T A C G G A G T T T T T T T G A SEQ 24 SP100D1

	2170	2180	
296			SEQ 43 and Figure 25 Briles
146	T G A G G A A A G A A T G G C G G C A T		SEQ 24 SP100D1
	2190	2200	
296			SEQ 43 and Figure 25 Briles
166	T C A A G A G A C T C T T T A A G A G A		SEQ 24 SP100D1
	2210	2220	
296			SEQ 43 and Figure 25 Briles
186	G T T A C G G G T T T T A A A C T A T T		SEQ 24 SP100D1
	2230	2240	
296			SEQ 43 and Figure 25 Briles
206	A A G C C T T C T C C A A T T G C A A G		SEQ 24 SP100D1
	2250	2260	
296			SEQ 43 and Figure 25 Briles
226	A G G C T T C A A T C T C T G C T A G G		SEQ 24 SP100D1
	2270	2280	
296			SEQ 43 and Figure 25 Briles
246	G T G C T A G C T T G C G A A A T G G C		SEQ 24 SP100D1
	2290	2300	
296			SEQ 43 and Figure 25 Briles
266	T C C A C G G A G T T T G G C A G C G C		SEQ 24 SP100D1
	2310	2320	
296			SEQ 43 and Figure 25 Briles
286	C A G A T G T T C C A C G G A G A T A G		SEQ 24 SP100D1
	2330	2340	
296			SEQ 43 and Figure 25 Briles
306	T G A G G A G C G A G G C C G C G G A A		SEQ 24 SP100D1

	2350	2360	
296			SEQ 43 and Figure 25 Briles
326	T T C A C G A A C T G C G A C G T T T T		SEQ 24 SP100D1
<hr/>			
	2370	2380	
296			SEQ 43 and Figure 25 Briles
346	C T C C T T T G A G G T T A A T C A A T		SEQ 24 SP100D1
<hr/>			
	2390	2400	
296			SEQ 43 and Figure 25 Briles
366	C G T T T C A A G T G T T C G T A G G C		SEQ 24 SP100D1
<hr/>			
	2410	2420	
296			SEQ 43 and Figure 25 Briles
386	G A T C T T C A T C T T G T C T T C A A		SEQ 24 SP100D1
<hr/>			
	2430	2440	
296			SEQ 43 and Figure 25 Briles
406	A G G T C A A A T C A G G T A G G A T T		SEQ 24 SP100D1
<hr/>			
	2450	2460	
296			SEQ 43 and Figure 25 Briles
426	T C T C C T G T T T C A A A G T T T A T		SEQ 24 SP100D1
<hr/>			
	2470		
296			SEQ 43 and Figure 25 Briles
446	G G T G G C C C T G G T T G A A G		SEQ 24 SP100D1

Decoration 'Decoration #1': Shade (with solid black) residues that match the Consensus exactly.